

**Penn Cambria**  
**14-15 School Year GRADE 2 MATH CURRICULUM OUTLINE**

*The shift to the PA Core Standards has necessitated a change in our math curriculum. This document contains the outline of units and topics for each unit for grade 2. The PA Core includes a heavy emphasis on application and multi-step problem solving. In addition, students must be able to show and/or explain their work as well as their reasoning.*

*Materials, resources, and assessments used in these units will be vetted by the grade level for alignment to the PA Core and to ensure strategies used are appropriate for our students. Resources might include those provided by the Common Core, the Pennsylvania Department of Education, the PDE Standards Aligned System, NY Engage, and Everyday Math.*

**\*Math Meeting**      3 days/week      Approx. 15 minutes of each lesson gradually increase difficulty

- ✓ Clocks
- ✓ Money
- ✓ Place value
- ✓ Number sentence

**\*Basic Facts Practice**      2 days/week      Approx. 15 minutes of each lesson

- ✓ Flash cards
- ✓ Math sharks
- ✓ Math mats
- ✓ Etc.

<b>Unit: 1      Numbers and Operations</b>
--

C.C.2.1.2.B.1      C.C.2.1.2.B.2      C.C.2.2.2.A

- ✓ Number sequence
- ✓ Skip count by 2, 5, 10, 25 (repeated addition)
- ✓ Coin ID (groups of same coins)
- ✓ Tallies
- ✓ Place value to the hundreds place
  - Compare
  - $< > =$
  - Order numbers
  - Equivalent names for #'s

<b>Unit: 2      Addition</b>
------------------------------

C.C.2.2.2.A.2      C.C.2.2.2.A.1

- ✓ Basic Facts
- ✓ +1      +0      +2      Doubles
- ✓ Doubles +1      Doubles +2
- ✓ Turn Arounds
- ✓ Coins (various coins)
- ✓ Word Problems
- ✓ Double Digit Addition (regrouping)

## Unit: 3 Subtraction/ Fact Families

C.C.2.4.2.A.1 C.C.2.4.2.A.2 C.C.2.4.2.A.3

- ✓ Basic Facts
- ✓ -1 -0 -2
- ✓ Fact Families
- ✓ Word Problems
- ✓ Coins with change (simple) ex; 60¢- 25¢
- ✓ 2/3 digit subtraction with/without regrouping

## Unit: 4 Clocks and Money

C.C.2.4.2.A.1 C.C.2.2.2.A.1 C.C.2.1.2.B.1 C.C.2.4.2.A.3

- ✓ Telling time to the nearest 5 minutes
- ✓ Digital and Analog
- ✓ AM and PM
- ✓ Word problems (clocks)
- ✓ Counting dollars and coins (addition)
- ✓ Making change dollars and coins
- ✓ Word problems (money)

## Unit: 5 Foundations for Multiplication

C.C.2.1.2.B.2 C.C.2.2.2.A.3

- ✓ Repeated addition
- ✓ Equal groups of amounts
- ✓ Arrays
- ✓ Word problems (simple equal groups of)

## Unit: 6 Place Value Extended (up to 1,000)

C.C.2.1.2.B.3 C.C.2.1.2.B.2

- ✓ Ordering
- ✓ Comparing
- ✓ Skip counting (50's, 25's, 100's)
- ✓ Adding within 1,000
- ✓ Subtraction within 1,000
- ✓ Word problems (both + and -)

## Unit: 7      Fractions

C.C.2.3.2.A.2

- ✓ Identify  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$  /introduction of concepts
- ✓ Partition shapes into  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$
- ✓ Fractions of sets
- ✓ Compare fractions
- ✓ Fraction number stories

## Unit: 8      Measurement

C.C.2.4.2.A.1    C.C.2.3.2.A.2    C.C.2.4.2.A.6

- ✓ Measurement tools introduction (ruler, tape measure, yard stick, meter stick)
- ✓ Measure using in/cm
- ✓ Measure to the nearest  $\frac{1}{2}$  in/cm
- ✓ Measure using yard/meter sticks
- ✓ Introduction of miles
- ✓ Finding/identifying appropriate measuring tools
- ✓ Word problems (+ and – involving length)

## Unit: 9      Data/Graphs

C.C.2.4.2.A.4

- ✓ Collection/sorting/distribution of data
- ✓ Bar graph
- ✓ Line Plot/Graph
- ✓ Picture graph
- ✓ Creation of all 3 types of graph from 1 set of data
- ✓ Word problems or graphs

## Unit: 10      Geometry

C.C.2.3.2.A.1

- ✓ Shapes review (discuss attributes)
- ✓ Discussion of parallel lines/polygon definition
- ✓ 2D/3D definition/ distinguish differences
- ✓ 2D/3D identification of shapes
- ✓ Construct 2D/3D (drawing, building, etc.)
- ✓ Word problems/analyze shapes